REMARKS

Reconsideration and allowance of the subject application are respectfully requested. Claims 1-27 are all the claims pending in the application. In response to the Office Action, Applicant respectfully submits that the claims define patentable subject matter.

Claims 1-6, 8, 14-18, 20, 26, and 27 are now rejected under 35 U.S.C. § 103(a) as being unpatentable over Rafii. Claims 7, 9-11, 19, and 21-23 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Rafii in view of Chung (U.S. Patent Application Publication No. 2005/0104869). Claims 12, 13, 24, and 25 remain rejected under 35 U.S.C. § 103(a) as being unpatentable over Rafii in view of Ng et al. (U.S. Patent Application Publication No. 2003/0193478, hereafter "Ng").

As a preliminary matter, the Examiner objects to the Abstract of the Disclosure because it allegedly is not related to the content of the original specification. By this Amendment, Applicant has filed a corrected Abstract of the Disclosure. Accordingly, the Examiner is requested to remove the objection.

The Examiner asserts that the claimed invention as defined in independent claims 1, 14, 26, and 27 is rendered obvious by the disclosure of Rafii. Applicant respectfully disagrees with the Examiner's position.

Applicant respectfully submits that there is no teaching or suggestion in Rafii of "a hand position and finger order determination unit that determines which button of a plurality of buttons of the virtual keyboard is stroked and which fingers are used to stroke the stroked button", as recited in independent claim 1 and analogously recited in independent claims 14, 26, and 27.

The Examiner asserts:

> For instance, routine 285 and CPU 270 can instruct the companion device 80 that, at rest, the user's left hand fingers touch the :"A", "S", "D" and "F" keys, and the user's right hand fingers touch the "J", "K", "L", and ":" keys(column 18, lines 51-56)); see Fig. 7A for the hand positioning and finger determination order.[2]

Applicant respectfully disagrees with the Examiner's position. This cited portion of Rafii merely discloses that the keys of a virtual keyboard that are directly under a user's fingers may be highlighted. When a key is struck, the struck key may be highlighted using a different color or contrast. If the keys are not in a correct rest position, the user may command a companion device to position the virtual keyboard in a proper starting position.

However, nowhere does this cited portion of Rafii teach or suggest determining which fingers are used to stroke the stroked button, as required by the claims.

Further, Applicant respectfully submits that there is no teaching or suggestion in Rafii of the feature "a key determination unit that finds a key value by matching the stroked button and the fingers used to stroke the stroked button with the predefined button and fingers mapped in the key information storage unit", as recited in claim 1.

Applicant notes that on Page 3 of the Office Action,[3] the Examiner asserts that Rafii discloses this feature of the claim. However, on Page 4 of the Office Action, the Examiner acknowledges that Rafii does not disclose this aspect of the claim. Nevertheless, Rafii merely discloses building a template by mapping positions of the user's fingers to specific keyboard

[2] Page 3 of the Office Action dated January 24, 2008.

[3] The paragraph bridging pages 3 and 4.

keys at a rest position of the user (column 20, lines 1-8). For instance, if when the user is at rest, the user's left fingers touch the "A", "S", "D", and "F" keys, and the user's right fingers touch the "J", "K", "L", and ":" keys, the routing 285 would move or relocate the virtual keyboard, so that these keys are adjacent to the user's fingers when the user is at rest. When the user's fingers are placed in a typing position (and prior to any selection of a key), the user's fingers are mapped to the template and recalibrated to the keys of the virtual keyboard before a typing session starts (column 20, lines 27-33).

Rafii further discloses mapping an image obtained from a sensor to the fingers of the template and mapping the touched keys to the natural position of the user (column 21, lines 35-41).

Accordingly, since it appears that the value of the keys are already known in Rafii, the claimed feature of finding a key value by matching the stroked button and the fingers used to stroke the stroked button with the predefined button and fingers mapped in the key information storage unit, simply does not read on the teachings of Rafii.

Still further with respect to claim 14, Applicant respectfully submits that there is simply no disclosure in Rafii of "identifying a stroked key value corresponding to the sensed virtual button, the sensed positions of the fingers and the fingers used to stroke the virtual button", as claimed. Column 21, lines 15-22 of Rafii which the Examiner cites as allegedly disclosing this feature of the claim merely discloses using templates to identify user finger positions from data obtained from a sensor. Nowhere does this cited portion of Rafii teach or suggest "identifying a stroked key value corresponding to the sensed virtual button, the sensed positions of the fingers and the fingers used to stroke the virtual button", as claimed.

With respect to independent claims 26 and 27, Applicant respectfully submits that there is no teaching or suggestion in Rafii of "mapping keys onto virtual buttons of a virtual keyboard that are selected by a user's fingers upon which are individually mounted a plurality of sensors" as recited in claim 26 and analogously recited in independent claim 27. The Examiner asserts that:

> [T]he sensor (20) comprises a plurality of rays (150)[4] projected on each finger represent a plurality of sensors.[5]

Applicant finds the Examiner's position baffling. It is quite clear that Rafii only discloses a single sensor 20 which focuses on the fingers of a user's hands. Applicant respectfully submits that there is simply no teaching or suggestion in Rafii of sensors individually mounted on a user's fingers. Further, contrary to the Examiner's assertions, "rays" are not sensors, but radiation emitted **by** the sensor.

Further with respect to claim 26, Applicant respectfully submits that there is no teaching or suggestion in Rafii of "determining the number of sensors; allocating key values according to the number of sensors; and mapping the allocated key values onto a first virtual button" as recited in claim 26 and analogously recited in claim 27. The Examiner again apparently reads the claimed plurality of sensors on the rays 140 of Rafii. As discussed above, rays are not sensors, accordingly, there is no disclosure in Rafii of determining the number of sensors and allocating key values according to the number of sensors as required by independent claim 26 and analogous independent claim 27.

---

[4] Applicant assumes that the Examiner meant "rays (140)".

[5] Page 11 of the Office Action dated January 24, 2008.

Lastly, Chung and Ng do not teach or suggest the above noted features of claims 1, 14, 26, and 27 which are missing from Rafii.

Accordingly, Applicant respectfully submits that independent claims 1, 14, 26, and 27 should be allowable because the cited references, alone or in combination, do not teach or suggest all of the features of the claims. Claims 2-13 and 15-25 should also be allowable at least by virtue of their dependency on independent claims 1 and 14.

In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

/Mark E. Wallerson/

Mark E. Wallerson
Registration No. 59,043

SUGHRUE MION, PLLC
Telephone: (202) 293-7060
Facsimile: (202) 293-7860

WASHINGTON OFFICE
23373
CUSTOMER NUMBER

Date: April 24, 2008